Using Cobra for Cost/Earned Value Management in an Oracle Financials Environment.

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Abstract

In some institutions managers **must** integrate cost, schedule, and technical scope of work across the project, and apply earned value management **while** supporting an enterprise business system based on Oracle Financials. Learn how the Jet Propulsion Laboratory integrated Oracle Projects with Cobra Cost Management software for integrated schedule and cost management to provide a powerful tool for project managers in a challenging environment!

Executive Summary

In some institutions managers **must** integrate cost, schedule, and technical scope of work across the project, and apply earned value management **while** supporting an enterprise business system based on Oracle Financials. Earned value is a method for project managers to objectively measure the amount of work accomplished on a project or contract. Earned value provides project managers with valid, timely, performance information (that is capable of audit) on which to base management decisions. Earned value management (EVM):

1. Integrates cost, schedule and technical (scope of work) aspects of a project,
2. Facilitates objective measurement and assessment of integrated performance throughout a project's life cycle, and
3. Provides project and line managers with better method of estimating and assessing final completion costs as well as the total span of the project.

It is easy or typical for technical managers to view EVM as merely a financial tool. However, if properly applied, EVM is much more. If managers support appropriate implementations, EVM can become the most important arrow in the project management "quiver." However, for EVM to be an effective management tool, it must be an integral component in the program and project management process. This paper will address how this integration can occur, and what tools will facilitate it.

When process engineers and managers at the Jet Propulsion Laboratory (JPL) struggled with these issues and the new NASA prime contract requirement to apply EVM, they knew that the project managers would need a new, user-friendly Cost Management/EVM (CM/EVM) system. An underlying constraint was that this new system must be integrated with the existing business system that utilizes the Oracle Financials modules. Because of development cost and schedule limitations the team was forced to use as much commercial off-the shelf (COTS) software as possible. This new system interfaces with the existing Oracle Projects (PA), Oracle Human Resources (HRMS) and Oracle General Ledger (GL) applications and incorporates COTS software for both schedule and cost management. The system currently uses Microsoft Project or Welcom's Open Plan Professional as the schedule tool, and Welcom's Cobra as the cost management/EVM tool. In uploading to Oracle, data from the Cobra tool is passed through JPL custom software, Project Partners Project Loader software, and the Oracle Activity Management Gateway (AMG). In downloading from Oracle, data is passed through JPL custom software to Cobra.

The system user interface uses a tiered approach: there is the standard Cobra interface via the user's PC screen; there is the advanced Cobra interface of transaction import; and a simple, user-friendly custom interface for distributed general that also uses the Cobra transaction import facility. The CM/EVM system

also includes re-engineered processes and detailed procedures to describe how to use the new project management/EVM capabilities.

This paper describes the processes, procedures, and software used to implement JPL's Cost Management/EVM system, as well as the training and rollout plan required to successfully deploy it. It also describes the challenges of the development project, and the "lessons learned" from the exercise.

About the Presenters

L. Bruce Gibby served as the process engineer and functional architect for the CM/EVM team during initial concept phase, design phase, development phase, implementation phase, and transition to production. He has extensive industrial and consulting experience in project controls, project management, and business systems development. He has worked for two years on the integration of third party project management tools with Oracle Projects at JPL. He holds a B.A. in Political Science from Occidental College, an M.B.A. in Finance from the University of California at Los Angeles, and a Ph. D. in International Business and Comparative Management from the University of California at Los Angeles. Bruce was a Howard Hughes Staff Fellow and NDEA Title IV Fellow during his graduate studies at UCLA.

J. Steve Joines served as the software engineer and lead developer for the CM/EVM team during the design phase, development phase, implementation phase, and transition to production.

+bio more data coming!

Randy Egger is the Founder and President of Project Partners, LLC. Previously Randy was the Chief Architect and Director of Oracle Projects at Oracle Corporation, and has been in the applications business since 1980.